

# THE FALSE PROMISES OF THE “BIO” BIN BAG

Production and disposal of PLA (polylactic acid)

## Cultivation

A lot of crops, land and water are needed to produce the raw materials for a bio-based bin-bag. Making one tonne of PLA requires...



**2.39 tonnes**  
maize



**0.37 hectares**  
land



**2 921 m³**  
water

## Production

Depending on the material the “bioplastic” is made of, it may use less energy than if it is made of petroleum.



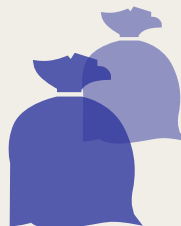
**40 MJ/kg**  
PLA



**80 MJ/kg**  
PE

## Use

“Bioplastic” bags are often used to dispose of organic waste.



## Disposal



Less than **40 %**  
of bio-based plastics  
are biodegradable.

## Current methods of disposing of biodegradable plastics



### Do not degrade in the sea

There is still no plastic that degrades in water quickly enough. Plastics cause huge problems in the oceans.



### Do not degrade in the soil

Current uses, including as mulch on vegetable fields, still cause plastic pollution.



### Not compostable at home

Under normal conditions, the composting process takes far too long and does not produce an acceptable compost for the garden.



### Not industrially compostable

Most plants are not equipped for composting. Many “bioplastics” are separated and sent to the incinerator.